D.O.T. 66

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE

STP-1111(7) Catoosa County

OFFICE Preconstruction

P.I. No. 650440

DATE

January 17, 1996

FROM

Wayne Hutto, Assistant Director of Preconstruction

TO

SEE DISTRIBUTION

PROJECT CONCEPT REPORT APPROVAL SUBJECT

Attached for your files is the approval for subject project.

CWH/cj

Attachment

DISTRIBUTION:

Walker Scott

Bobby Mustin

David Studstill (ATTN: Harvey Keepler)

Jerry Hobbs

Herman Griffin

Darrell Elwell (ATTN: Michael Henry)

Marion Waters

Toni Dunagan

Paul Liles

Jim Kennerly

Charles Law

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE

STP-1111(7) Catoosa County

OFFICE Preconstruction

P.I. No. 650440

DATE

January 2, 1996

FROM

E., Director of Preconstruction

TO

Wayne Shackelford, Commissioner

SUBJECT PROJECT CONCEPT REPORT

This project is the widening of SR 146/Cloud Springs Road from just west of Lakeview Drive/CR 553 easterly to the southbound ramps at the I-75 interchange for a total of 3.77km. The existing roadway consists of two, 6.7m - 7.2m lanes with variable 0.3m - 3.0m rural shoulders. The existing right-of-way varies from 15.2m to 18.2m. The existing major structure consists of a 134.0m x 13.4m bridge over West Chickamauga Creek with a sufficiency rating of 95.9. The base year traffic (1998) is 17,700 VPD and the design year traffic (2018) is 26,700 VPD. The posted speed is 65km/h and the design speed in 70km/h.

The proposed construction will widen SR 146/Cloud Springs Road with two, 3.6m lanes in each direction separated by a 6.1m raised median for the entire project length. State Route 146 will be widened symmetrically along the entire project except for the section between Dietz Road and Market Place Mall, which is on new location on the north side of SR 146. The proposed right-ofway will vary from 27.0m to 61.0m. The existing substandard horizontal and vertical alignment will be corrected to meet the proposed 70km/h speed design. An urban typical section will be utilized between Lakeview Drive and Reynolds Drive to minimize right-of-way impacts. The existing bridge over West Chickamauga Creek will be widened to 26.8m. This roadway will remain open to traffic during construction.

Environmental concerns include requiring a COE 404 permit; an Environmental Assessment will be prepared; possible wetlands impacts; a TVA permit is required; an examination for threatened and endangered fish and mussels is required; an archaeological and historical survey is required; a public hearing will be held; time saving procedures are not appropriate.

Wayne Shackelford Page 2 January 2, 1996

STP-1111(7) Catoosa

The estimated costs for this project are:

	PROPOSED	APPROVED	PROG DATE
Construction (includes E&C and inflation)	\$5,291,000	\$4,171,000	1999
Right-of-Way	\$3,551,000	\$1,167,000	1999
Utilities*	\$2,050,000		

^{*}LGPA sent 3-2-92 requesting Catoosa County be responsible for utility relocations.

The proposed improvements will provide a safer and more efficient roadway. This project is in the STIP. I recommend this project concept be approved.

WWS:JDQ/cj

Attachment

CONCUR_

Frank L. Danchetz, P.E., Chief Engineer

APPROVE

Wayng Shackelford, Commissioner

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP-1111(7) CATOOSA

RGIA

PRECURSIRATION

OFFICE Atlanta, Georgia

P.I. NO. 650440

DATE NOVEMBER 13, 1995

FROM

Bob Mustin, Project Review Engineer

OT

C. Wayne Hutto, Assistant Director of Preconstruction

SUBJECT PROJECT CONCEPT REPORT

The concept report submitted November 7, 1995 by the letter from James Kennerly dated October 30, 1995 has been reviewed and is considered satisfactory.

The estimated costs for the project are as follows:

Construction	\$ 4,373,000	
Inflation	\$ 437,000	
E & C	\$ 481,000	
Right of Way	\$ 3,551,000	
Reimbursable Utilities	\$ 2,050,000	(LGPA?)

DTM

c: Jim Kennerly

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE

STP-1111(7)Catoosa County

OFFICE Atlanta

P.I. No. 650440

DATE October 30, 1995

FROM

James Kennerly, State Road & Airport Design Engineer

TO

C. Wayne Hutto, Assistant Director of Preconstruction

SUBJECT Concept Report

Attached for your review is the original Concept Report for this project. We are distributing copies of the report to the appropriate offices for their review, comments, and signatures.

These offices should return their comments and a copy of the signed cover sheets (pages 1 and 2 of the concept report) to the Assistant Director of Preconstruction within 2 weeks of receiving this concept report.

JAK:MMG:JSS Attachments

c: David Studstill
Charles Law
Bob Mustin
Marion Waters
Paul Liles

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA OFFICE OF ROAD AND AIRPORT DESIGN

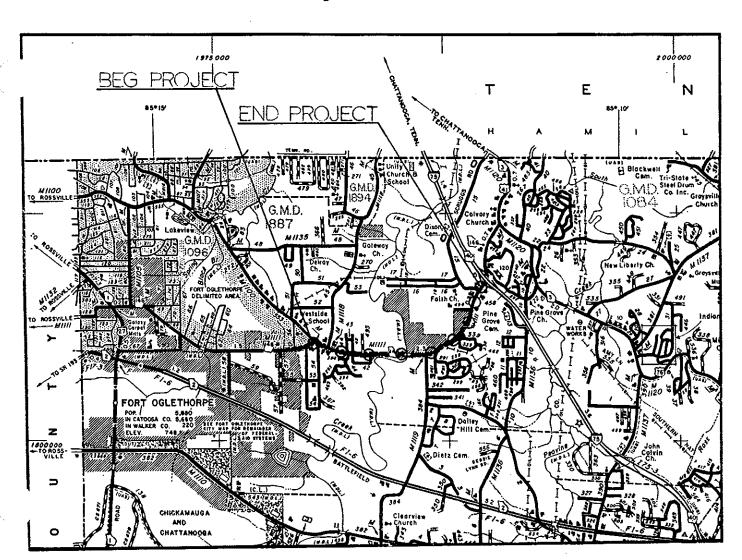
PROJECT CONCEPT REPORT STP - 1111(7) CATOOSA COUNTY

S.R. 146/CLOUD SPRINGS ROAD WIDENING AND RECONSTRUCTION FROM LAKEVIEW DRIVE TO I - 75

FEDERAL ROUTE NO: STATE ROUTE NO: 146 GADOT P.I. NO: 650440 Date of Report: 10/27/95

	RECOMMENDATION FOR APPROVAL
DATE 11/6/95	State Road & Airport Design Engineer
DATE	State Environmental Engineer
DATE	State Traffic Operations Engineer
DATE	District Engineer
DATE	State Bridge Engineer

PROJECT MAP - Project No. : STP - 1111 (7)



PROJECT NUMBER: STP - 1111 (7)

PROJECT LOCATION & DESCRIPTION

This project begins at a point on S.R. 146/Cloud Springs Road just west of Lakeview Drive and extends easterly along S.R. 146 to the intersection of the southbound ramps at the I-75 interchange. The proposed typical section consists of two twelve foot (3.6 meter) wide lanes in each direction separated by a twenty foot (6.1 meter) wide raised median. Substandard horizontal and vertical alignment will be corrected to meet the proposed 45 MPH (70 KPH) speed design. Curb and gutter would be used to minimize right of way impacts from Lakeview Drive to Reynolds Drive.

PROJECT LENGTH: 2.34 MILES/3.77 KM

	TRAF	FIC	
CUR	RENT	PROJ	ECTED
YEAR	AADT	YEAR	AADT
<u>1998</u>	<u>17700</u>	2018	26700

PDP CLASSIFICATION	FUNCTIONAL CLASSIFICATION
MAJOR	URBAN MINOR ARTERIAL
·	

NON-CA ()	CA ()	EXEMPT (X)	N/A ()

PAGE 4

P.I. NO: 650440

PROJECT NEED & PURPOSE

SEE ATTACHED SHEET

EXISTING ROADWAY

TYPICAL SECTION: 2 - 22 to 24 foot lanes 1 to 10 foot wide shoulders. (2 - 6.7 - 7.2 meter lanes with 0.3 to 3.0 meter wide shoulders.)

R/W WIDTH

50-60 FT/ 15-18 M

POSTED SPEED

MAX DEGREE OF CURVE

MAXIMUM GRADE

40 MPH/ 65 KPH

14.00 DEG./125 M(RAD)

6.50%

MAJOR STRUCTURES:

1. Bridge over West Chickamauga Creek - 440 ft (134 M) x 44 ft (13.4 M)

PROPOSED ROADWAY

TYPICAL SECTION: 4 - 12 foot (3.6 m) wide lanes with 20 foot (6.1 m) wide raised median

DESIGN SPEED

MAX DEGREE OF CURVE

MAX GRADE

45 MPH/70KPH ALLOWABLE: 9°30'/185M(RAD) ALLOWABLE: 7.0 %

PROPOSED: 9°30'/185M(RAD)

PROPOSED: 5.0 %

MAJOR STRUCTURES:

1. Widen existing bridge over West Chickamauga Creek to 88 feet (26.8 m).

PAGE 5 P.I. NO: 650440

	PROPOSED	RIGHT	OF 1	WAY				
R/W WIDTH					D.	SPLACE	IEN'	rs
90 FT (27 M) TO 200 FT	(61 M)		RE	ES:	<u>4</u>	BUS:	<u>5</u>	M.H.: <u>0</u>
TYPE OF ACCESS CONTROL: Permit								
NUMBER OF PARCELS:90+/-								

COORDINATION

CONCEPT TEAM MEETING DATE: 10/19/95

LOCATION INSPECTION DATE: 3/31/95

PERMITS REQUIRED (4f, COE, 404, etc.): 106, 404

LEVEL OF PUBLIC INVOLVEMENT: PUBLIC HEARING TO BE HELD

TIME SAVING PROCEDURES APPROPRIATE: NO

OTHER PROJECTS IN THE AREA: NH-IM-75-3(196), STP-1120(2)

MISCELLA	ANEOUS		
TRAFFIC CONTROL DURING CONSTRUCTION	: Construct	under tr	affic
LEVEL OF ENVIRONMENTAL ANALYSIS: EN	VIRONMENTAL	ASSESSME	INT
DESIGN VARIATIONS REQUIRED:	(YES)	(NO) (UNDETERMINED)
SUBST HORIZ ALIGNMENT	()	(X)	()
SUBST ROADWAY WIDTH	()	(X)	()
SUBST SHOULDER WIDTH	()	(X)	()
SUBST VERT GRADES	()	(X)	()
SUBST CROSS SLOPES	()	(X)	()
SUBST STOPPING SIGHT DIST	()	(X)	()
SUBST SUPERELEV RATES	()	(X)	()
SUBST HORIZ CLEARANCE	()	(X)	()
SUBST SPEED DESIGN	()	(X)	()
SUBST VERTICAL CLEARANCE	()	(X)	()
SUBST BRIDGE WIDTH	()	(X)	()
SUBST BR STRUCT CAPACITY	()	(X)	()

PAGE 6 P.I. NO: 650440

MISCELLANEOUS

UNDERGROUND STORAGE TANKS: 6 ACTIVE SITES; 1 INACTIVE SITE

HAZARDOUS SITES: NONE KNOWN

ALTERNATIVES CONSIDERED

A five-lane typical section was considered for this project but was rejected due to the high volume of traffic.

A no-build alternative was also considered but was rejected due to the rapid growth of the area, high traffic volumes, and a substandard existing roadway.

ESTIMATED COST						
CONSTRUCTION:	\$	4,372,575	RIGHT-OF-WAY:	\$	3,551,000	
E & C (10%):	\$	437,258	ACQUIRED BY :	D.O.	. т	
INFLATION :	\$	480,983	UTILITIES :	\$	2,049,600	
			ADJUSTED BY :	UTI	LITIES, LGPA	
TOTAL (TOTAL CONSTRUCTION COST:		\$5,290,816			

COMMENTS:

ATTACHMENTS: NEED AND PURPOSE STATEMENT, CONCEPT TEAM MEETING MINUTES PRELIMINARY COST ESTIMATE, TYPICAL SECTION

PAGE 8 P.I. NO: 650440

PRELIMINARY COST ESTIMATE

PROJECT NUMBER: STP - 1111 (7)

COUNTY: CATOOSA

DATE: 10/27/95

ESTIMATED LETTING DATE: FY 99

PREPARED BY: Jim Simpson PROJECT LENGTH (MILES): 2.34 MILES/3.77 KM

() PROGRAMMING PROCESS (X) CONCEPT DEVELOPMENT () DURING PROJECT DEV.

PROJECT COST	
A. RIGHT-OF-WAY:	
1. PROPERTY (LAND & EASEMENT)	\$ 687,000
2. DISPLACEMENTS; RES:4, BUS;5, M.H.:0	\$ 1,272,000
3. OTHER COST (ADM./COST, INFLATION)	\$ 1,592,000
SUBTOTAL: A	\$ 3,551,000
B. REIMBURSABLE UTILITIES:	
1. RAILROAD	\$ 0
2. TRANSMISSION LINES	\$ 0
3. SERVICES	\$ 2,049,600
SUBTOTAL: B	\$ 2,049,600
C. CONSTRUCTION:	
1. MAJOR STRUCTURES	\$ 0
a. RETAINING WALLS	\$ 0
b. BRIDGES widening of bridge	\$ 968,000
c. DETOURS BRIDGES	\$ 0
d. BOX CULVERTS	\$ 92,300
SUBTOTAL:C-1	\$ 1,060,300
2. GRADING AND DRAINAGE:	
a. EARTHWORK 70000 cy uncl and 50000 cy borrow	\$ 458,100
2. DISPLACEMENTS; RES:4, BUS;5, M.H.:0 3. OTHER COST (ADM./COST, INFLATION) SUBTOTAL:A REIMBURSABLE UTILITIES: 1. RAILROAD 2. TRANSMISSION LINES 3. SERVICES SUBTOTAL:B CONSTRUCTION: 1. MAJOR STRUCTURES a. RETAINING WALLS b. BRIDGES widening of bridge c. DETOURS BRIDGES d. BOX CULVERTS SUBTOTAL:C-1 2. GRADING AND DRAINAGE:	
1) Cross Drain Pipe (exclude box culverts)	\$ 206,795
2) Curb and Gutter	\$ 67,060
3) Longitudinal System(include catch basins)	\$see b. 1.
SUBTOTAL: C-2	\$ 731,955

		PROJECT	COST			
3. BAS	SE AND PAVING:					
a.	AGGREGATE BASE		10" GAB		\$	485,440
b.	ASPHALT PAVING:	Surface	1.5" E	\$190,710		
		Binder	2" B	\$256,720		
		Base	3 "	\$331,890		
			SUBTO	TAL:C-3.b	\$	779,320
c.	CONCRETE MEDIAN	23400 SY	@ \$30.81/S	Y	\$	720,950
d.	OTHER	tack	and level	ing	\$	17,730
			SUI	BTOTAL:C-3	\$	2,003,440
4. LU	MP ITEMS:					
a.	TRAFFIC CONTROL				\$	75,00
b.	CLEARING AND GR	UBBING			\$	300,00
c.	LANDSCAPING				\$	20,00
d.	EROSION CONTROL				\$	75,00
e.	DETOURS				\$	······································
			su	BTOTAL:C-4	\$	470,00
5. M	SCELLANEOUS:				_	
a	LIGHTING				\$	
b	. SIGNING - STRIF	ING - SIG	VAL		\$	60,00
С	. GUARDRAIL				\$	46,88
d	. SIDEWALK				\$	
			st	BTOTAL: C-5	\$	106,88
6. S	PECIAL FEATURES_		SU	BTOTAL:C-6	\$	

ESTIMATE SUMMARY					
A. RIGHT-OF-WAY	\$	3,551,00			
B. REIMBURSABLE UTILITIES	\$	2,049,60			
C: CONSTRUCTION					
1. MAJOR STRUCTURES	\$ 1,060,300				
2. GRADING AND DRAINAGE	\$ 731,955				
3. BASE AND PAVING	\$ 2,003,440				
4. LUMP ITEMS	\$ 470,000				
5. MISCELLANEOUS	\$ 106,880				
6. SPECIAL FEATURES	\$ 0				
SUBTOTAL CONSTRUCTION COST	\$ 4,372,575				
E. & C. (10%)	\$ 437,258				
INFLATION (5% PER YEAR)	\$ 480,983				
NUMBER OF YEARS 2					
TOTAL CONSTRUCTION COST	\$	5,290,8			
GRAND TOTAL PROJECT COST	\$	10,891,4			

(10-19-45

NEED AND PURPOSE CLOUD SPRINGS ROAD/SR 146 STP-1111(7) PI# 650440 CATOOSA COUNTY

This project begins just east of Lakeview Drive, near the City of Rossville, and extends eastward to the I-75 interchange. The proposed improvement will provide a safer and more efficient route along this corridor. The project length is 2.34 miles (3.74 km) and will widen the existing two-lane facility to a four-lane facility with a 20 foot (6.2 m) median. The current ADT (1994) is 11,500 VPD with a projected ADT (2014) of 25,000 VPD. The existing facility consists of substandard horizontal and vertical alignments with low design speeds. These corrected deficiencies will allow for a proposed 45 MPH (72 KPH) speed design.

Because of congestion created with the opening of a shopping center at the I-75 interchange, this project was originally identified in 1984 as an immediate need. Recently, the shopping center has experienced a severe decline in tenants, but, the traffic demands have continued to increase due to rapid residential, commercial, and industrial development. Vehicles queuing onto the southbound mainline of I-75 during the evening rush hour occurs frequently.

The project is included in the Chattanooga Urban Area Transportation Study (CUATS) 2015 Transportation Plan. It is also identified in the CUATS FY 96-98 Transportation Improvement Program (TIP) for Right-of-Way acquisition in FY 97. Construction funds have been identified for FY 99.

The project is the first of several identified in the CUATS 2015 Transportation Plan that will provide increased access and mobility in the North Georgia area. Other projects that relate to this are: 1) widening SR 146 from I-75 east to US 41, 2) widening Lakeview Drive from SR 146 to US 27, and 3) widening Dietz Road from SR 146 to SR 2. Once completed, this network will serve the transportation and mobility needs for the SR 146 corridor.

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP-1111(7) Catoosa County

OFFICE

Atlanta

P.I. No. 650440

DATE

October 26, 1995

FROM

Jay Simone, T.E. I

TO

Distribution Below

Concept Team Meeting - S.R. 146 Improvements SUBJECT

Date/Time: October 19, 1995 10:00 A.M.

Road and Airport Design Conference Room

Attending: Ron Braziel, Mike Gannaway, Jim Simpson, and Jay Simone of Road Design; Reba P. Scott, DOT

Programming; Tonye Kheir, DOT Engineering Services; Keith Golden, DOT Planning; Del Clippard, DOT Traffic Operations; Robin Brown, DOT Relocation; W. Paul Simmons, DOT District 6 Utilities; Dennis Thompson, DOT District 6 Road Design; and J. W.

Smith, Fort Oglethorpe.

The meeting was opened by Ron Braziel who gave a brief description of the project. The project was then described in detail by Jim Simpson.

Project STP-1111(7) in Catoosa County is proposed to improve S.R. 146/Cloud Springs Road from Lakeview Drive to the southbound ramps at the I-75 interchange. The length of the project is 2.34 miles (3.77 km). Traffic volumes are projected to be 17,700 ADT in 1998 and 26,700 ADT in 2018. The existing typical section is 22 to 24 feet (6.7 to 7.2 m) of pavement with 2 lanes and shoulders that are 1 to 10 feet (0.3 to 3.0 m) wide. The typical section proposed is two 12 ft. (3.6 m) wide lanes in each direction separated by a 20 ft. (6.1 m) wide raised median. Curb and gutter will be used to minimize rightof-way impacts from Lakeview Drive to Reynolds Drive. Reynolds Drive to I-75 there is a 10 foot (3.0 m) wide shoulder with 4 feet (1.2 m) paved. Existing right-of-way varies from 50 ft. (15 m) to 60 ft. (18 m). The proposed right-of-way will vary from 90 ft. (27 m) to 200 ft. (61 m). S.R. 146 will be widened symmetrically along the entire project except for the section between Dietz Road and Market Place Mall which is on location on the north side of existing S.R. 146. Substandard vertical and horizontal alignment will be corrected to meet the proposed 45 mph (70 kph) speed design. The maximum existing grade is 6.5% and the maximum proposed grade is 5.0%. The maximum existing degree of curve is 14°00' (125 R) and 9°30' (185 R) as proposed. There is an existing 440 ft. (134 m) \times 44 ft. (13.4 m) bridge over the West Chickamauga Creek that is proposed to be widened to 88 ft. (26.8 m). The sufficiency rating of the existing bridge is 95.9. Access would be by permit along the entire project. There are some wetlands along

Concept Team Meeting Minutes S.R. 146 Improvements October 26, 1995
Page 2

the project and the project will require an environmental assessment. There are approximately 90 parcels on the project with 2 possible relocations.

The project concept was reviewed and the following comments and recommendations were made:

DISTRICT 6

Comment:

There are seven U.S.T. sites located throughout the project. Of these seven sites, six are active and one is inactive. There are wetlands throughout the project corridor. No hazardous waste sites have been identified

been identified.

PLANNING

Comment:

This project is included as part of the metropolitan

Chattanooga transportation plan.

RIGHT-OF-WAY

Comment:

No Comments

UTILITIES

Comment:

North Georgia EMC relocations will cost \$42,200 to relocate 37 poles and is reimbursable. Bell South relocations will cost \$520,000 and is non-reimbursable. Atlanta Gas Light relocations will cost \$220,022 and is non-reimbursable. Colonial Pipeline relocations will cost \$1,000,000 for the lines and \$200,000 for right-of-way and the cost is reimbursable. AT&T switch station relocation will cost \$800,000 to relocate and is reimbursable. Catoosa Water will cost \$270,000 to relocate and will be a local government cost. Battlefield Cable relocations will cost \$7,400 and is a reimbursable cost. Total cost of utility relocations is \$3,059,622. There is no sewer located on the project.

The project may be on top of the Colonial pipeline for approximately 1400 feet. The pipe is approximately 4 feet deep and they will not allow it to be cased to prevent the relocation.

PROGRAMMING

Comment:

No LPGA as of this date. It was sent out in 1992. Right-of-way shows FY 98 and const shows FY 2000. Costs need to be updated.

MAINTENANCE

Comment:

The area around the bridge has flooded and caused

the road to be closed twice in the past 5 years.

Response:

The bridge office will do a hydraulic study in this

area.

Concept Team Meeting Minutes S.R. 146 Improvements October 26, 1995 Page 3

Is it possible to get a dual left turn onto Dietz Comment:

Rd. since there is a peak of 344 left turns per hour? Also give consideration to a signal at Mack

Smith Rd.

The department is in the process of signalizing Response:

Dietz Rd.

Can a right turn lane be added at Dietz Road. Comment:

We will analyze the need for the lane. Response:

Dietz Rd. is the main side road along the project. Comment:

Is it possible to move the median opening across

from Dietz Rd. and relocate Industrial Drive.

Yes it is. Response:

The city wants this project and would like the Dietz Comment:

Rd. relocation project. There is going to be a new Wal-Mart and Lowes and traffic is real bad now.

Programming shows the Dietz Rd. relocation project Response:

as long range, but maybe we could relocate Dietz Rd.

on this project.

ENGINEERING SERVICES

No comments Comment:

ADDITIONAL QUESTIONS AND COMMENTS

Why is there the area of new location? Comment:

To correct the substandard horizontal curves. Response:

What is being displaced? Comment:

At this time there are two businesses being displaced, but we will know more after we get a Response:

survey.

Why is the median being stopped before the ramps. Comment:

To allow us to tie into the existing lanes. Response:

is an interchange project that has dual left turn lanes and it may be possible to extend the median to

them.

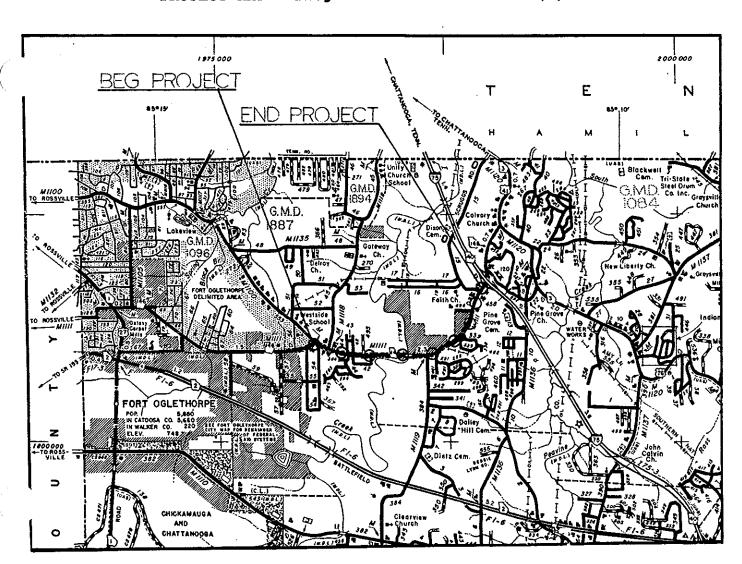
JTS

Distribution:

Frank Danchetz John Lively David Studstill Larry Seabrook Marion Waters Tom Turner Ronald Collins Herman Griffin Toni Dunagan Paul Liles Bob Mustin Dudley Ellis David Meshberger Charles Law

\	RECOMMENDATION FOR APPROVAL
DATE 11/6/95	State Road & Airport Design Engineer
DATE	State Environmental Engineer
DATE	State Traffic Operations Engineer
DATE	District Engineer Peul V. Yiles
	State Bridge Engineer

PROJECT MAP - Project No. : STP - 1111 (7)



DEPARTMENT OF TRANSPORTATION RECEIVED STATE OF GEORGIA NOV 2.7 1905

PRECONSTRUCTION

INTERDEPARTMENT CORRESPONDENCE

FILE STP-1111(7) Catoosa County

P.I. No. 650440

OFFICE Traffic Operations

Atlanta, Georgia

DATE November 21, 1995

FROM Marion G. Waters, III, P.E., State Traffic Operations Engineer

TO Wayne Hutto, Assistant Director of Preconstruction

SUBJECT Project Concept Report Review

We have reviewed the concept report on the above project for the widening of SR 146/Cloud Springs Road from just west of Lakeview Drive/CR 553 easterly for 2.34 miles (3.77 kilometers) to the southbound ramps at the I-75 interchange. The existing two lane roadway will be widened to four lanes divided by a twenty foot (6.1 meter) raised median. A curb and gutter section will be used on a portion of the project to minimize right of way impacts. The horizontal and vertical alignments will be improved to meet the 45 mph (70 km/h) design speed.

We believe this concept will improve safety and operational capacity along this section of roadway. We therefore find this report satisfactory for approval.

MGW:TOC:dc

Attachment (signature page)

cc: David Studstill
 James Kennerly (Attn: Mike Gannaway)
 Bob Mustin, w/attachment
 General Files

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT STP - 1111(7) CATOOSA COUNTY

S.R. 146/CLOUD SPRINGS ROAD WIDENING AND RECONSTRUCTION FROM LAKEVIEW DRIVE TO I - 75

FEDERAL ROUTE NO: STATE ROUTE NO: 146 GADOT P.I. NO: 650440 Date of Report: 10/27/95

	RECOMMENDATION FOR APPROVAL
DATE 11/6/95	State Road & Airport Design Engineer
DATE 11/21/95 DATE	State Environmental Engineer M. C. Waters H. State Traffic Operations Engineer
DATE	District Engineer
DATE	State Bridge Engineer

PROJECT MAP - Project No. : STP - 1111 (7)

